



**Billing Code: 5001-06**

**DEPARTMENT OF DEFENSE**

**Office of the Secretary**

**(Transmittal No. 16-30)**

**36(b)(1) Arms Sales Notification**

**AGENCY:** Department of Defense, Defense Security Cooperation Agency.

**ACTION:** Notice.

**SUMMARY:** The Department of Defense is publishing the unclassified text of a section 36(b)(1) arms sales notification. This is published to fulfill the requirements of section 155 of Public Law 104-164 dated July 21, 1996.

**FOR FURTHER INFORMATION CONTACT:** Chandelle K. Parker, DSCA/OGC, (703) 697-9027.

The following is a copy of a letter to the Speaker of the House of Representatives, Transmittal 16-30 with attached Policy Justification and Sensitivity of Technology.

Dated: August 18, 2016.

Aaron Siegel,  
Alternate OSD Federal Register Liaison Officer,  
Department of Defense.



DEFENSE SECURITY COOPERATION AGENCY  
201 12TH STREET SOUTH, STE 203  
ARLINGTON, VA 22202-5408

9 AUG 2016

The Honorable Paul D. Ryan  
Speaker of the House  
U.S. House of Representatives  
Washington, DC 20515

Dear Mr. Speaker:

Pursuant to the reporting requirements of Section 36(b)(1) of the Arms Export Control Act, as amended, we are forwarding herewith Transmittal No. 16-30, concerning the Department of the Air Force's proposed Lead-Nation sale to the NATO Support and Procurement Agency (NSPA) for defense articles and services estimated to cost \$231 million. After this letter is delivered to your office, we plan to issue a news release to notify the public of this proposed sale.

Sincerely,

A handwritten signature in black ink, appearing to read "J. W. Rixey".

J. W. Rixey  
Vice Admiral, USN  
Director

Enclosures:

1. Transmittal
2. Policy Justification
3. Sensitivity of Technology



## Transmittal No. 16-30

Notice of Proposed Issuance of Letter of Offer  
Pursuant to Section 36(b)(1)  
of the Arms Export Control Act, as amended

(i) Prospective Purchaser: NATO Support and Procurement Agency (NSPA) as Lead Nation for potential subsequent retransfer to Belgium, Czech Republic, Denmark, Greece, Netherlands, Norway, Portugal, and Spain in accordance with Section 3(d)(4)(C)(ii)

(ii)	<u>Total Estimated Value:</u>	
	Major Defense Equipment*	\$151 million
	Other	<u>\$ 80 million</u>
	TOTAL	\$231 million

(iii) Description and Quantity or Quantities of Articles or Services under Consideration for Purchase:

Major Defense Equipment (MDE):

Five hundred (500) Joint Direct Attack Munition (JDAM) Guidance Kits, KMU-556 F/B

Forty (40) JDAM Guidance Kits, KMU-557 F/B

One thousand five hundred (1,500) JDAM Guidance Kits, KMU-572 F/B

One thousand (1,000) MAU 210 E/B Computer Control Groups for 1,000-lb. Enhanced Paveway IIs

Three hundred (300) MAU 210 E/B Computer Control Groups for GBU-49s

One thousand twenty-five (1,025) MAU 169 L/B Computer Control Groups for GBU-12s

One thousand and three hundred fifty (1,350) Joint Programmable Fuzes, FMU-152 A/B

Sixty (60) Bomb Fin Assembly and Airfoil Group 650-MXU K/B for GBU-12s

One thousand twenty-five (1,025) Bomb Fin Assembly and Airfoil Group, MXU-650 K/B AFG for GBU-12s

Non-MDE:

This request also includes the following Non-MDE: Detector Sensing Unit (DSU)-38A/B Laser sensors, DSU-330/B proximity sensors, Wireless Paveway Avionics Kit (WIPAK) interfaces for Enhanced Paveway TI bombs, FMU-139C/B electronic bomb fuzes, repair and return services, transportation, engineering services, and other support services.

(iv) Military Department: Air Force (YAA)

(v) Prior Related Cases, if any: None

(vi) Sales Commission, Fee, etc., Paid, Offered, or Agreed to be Paid: None

(vii) Sensitivity of Technology Contained in the Defense Article or Defense Services Proposed to be Sold: See Attached annex.

(viii) Date Report Delivered to Congress: 9 AUG 2016

\*as defined in Section 47(6) of the Arms Export Control Act.

### POLICY JUSTIFICATION

#### NATO Support and Procurement Agency – Precision Guided Munitions

NATO Support and Procurement Agency as Lead Nation has requested a possible sale of precision guided munitions for subsequent retransfer to Belgium, Czech Republic, Denmark, Greece, Netherlands, Norway, Portugal, and Spain. Included are: five hundred (500) Joint Direct Attack Munition (JDAM) Guidance Kits, KMU-556 F/B; forty (40) JDAM Guidance Kits, KMU-557 F/B; one thousand five hundred (1,500) JDAM Guidance Kits, KMU-572 F/B; one thousand (1,000) MAU 210 E/B Computer Control Groups for 1,000-lb. Enhanced Paveway IIs; three hundred (300) MAU 210 E/B Computer Control Groups for GBU-49s; one thousand twenty-five (1,025) MAU 169 L/B Computer Control Groups for GBU-12s; one thousand three hundred fifty (1,350) Joint Programmable Fuzes, FMU-152 A/B; sixty (60) Bomb Fin Assembly and Airfoil Group 650-MXU K/B for GBU-12s; one thousand twenty-five (1,025) Bomb Fin Assembly and Airfoil Group, MXU-650 K/B AFG for GBU-12s. It also includes Detector Sensing Unit (DSU)-38A/B Laser sensors; DSU-33D/B proximity sensors; Wireless Paveway Avionics Kit (WIPAK) interfaces for Enhanced Paveway II bombs; FMU-139C/B electronic bomb fuzes; repair and return services; transportation; engineering services; and other support services. The estimated value is \$231 million.

The proposed sale improves NATO members' capability to meet current and future ground threats with precision. They will use the enhanced capacity as a deterrent to regional threats, and to increase interoperability within contingency operations. Many of the purchasing nations already have precision-guided munitions in their inventories and will have no difficulty absorbing these additional munitions.

The proposed sale of this equipment and support will not alter the basic military balance in the region.

The prime contractors for production are the Boeing Corporation of St Louis, Missouri, and Raytheon Missile Systems of Tucson, Arizona. There are no known offset agreements proposed in connection with this potential sale.

Implementation of this proposed sale will not require the assignment of any additional U.S. Government or contractor representatives to NATO.

There is no adverse impact on U.S. defense readiness as a result of this proposed sale.

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Annex Item  
No. vii

(vii) Sensitivity of Technology:

1. The Joint Direct Attack Munition (JDAM) is a guidance kit that converts existing unguided free-fall bombs into precision-guided "smart" munitions. By adding a new tail section containing Inertial Navigation System (INS) /Global Positioning System (GPS) guidance to existing inventories of BLU-109, BLU-111, and BLU-117, or MK-84 and MK-82 bombs, the cost effective JDAM provides highly accurate weapon delivery in any "flyable" weather. The INS, using updates from the GPS, helps guide the bomb to the target via the use of movable tail fins. The bomb is fitted with the MXU-650 airfoil and the MAU-169 L/B Computer Control Group (CCG) or the MAU-210E/B to guide to its laser-designated target. The JDAM All Up Round (AUR) and all of its components are UNCLASSIFIED; technical data for JDAM are classified up to SECRET. Weapon accuracy is dependent on target coordinates and present position as entered into the guidance control unit. After weapon release, movable tail fins guide the weapon to the target coordinates.

2. The KMU-556 F/B, KMU-557 F/B and the KMU-572 F/B are the tail kits for the GBU-31. They contain a GPS Receiver Card with Selective Availability Anti-Spoofing Module (SAASM). Information revealing SAASM implementation details such as number or length of keying variables, circuit diagrams, specific quantitative measures, functions, and capabilities is classified SECRET.

3. The DSU-38A/B Laser Sensor uses both GPS-aided inertial navigations and/or Laser guidance to execute threat targets. The Laser sensor enhances standard JDAM's reactive target capability by allowing rapid prosecution of fixed targets with large initial target location errors (TLE). The DSU-38A/B Laser sensor also provides the additional capability to engage mobile targets moving up to 70 mph. The DSU-38 Laser sensor is a strap down (non-gimbaled) sensor that attaches to the Mk-82 or BLU-111 bomb body in the forward fuze well. The addition of the DSU-38 Laser sensor combined with additional cabling and mounting hardware turns a standard GBU-38 JDAM into a GBU-

54 Laser JDAM. Information revealing target designation tactics and associated aircraft maneuvers, the probability of destroying specific/peculiar targets, vulnerabilities regarding countermeasures and the electromagnetic environment is classified SECRET. Information revealing the probability of destroying common/unspecified targets, the number of simultaneous lasers the laser seeker head can discriminate, and data on the radar/infra-red frequency is classified CONFIDENTIAL.

4. The FMU-152 fuze is a Multi-Delay, Multi-Arm and Proximity Sensor compatible with General Purpose Blast, Fragmentation and Hardened-Target Penetrator Warheads. It is cockpit selectable in-flight (prior to release) when used with JDAMS weapons. It can interface with the following weapons: GBU-10, GBU-12, GBU-15, GBU-16, GBU-24, GBU-27, GBU-28, GBU- 31, GBU-32, GBU-38, and AGM-130.

5. If a technologically advanced adversary obtained knowledge of the specific hardware and software elements, the information could be used to develop countermeasures which might reduce weapon system effectiveness or be used in the development of a system with similar or advanced capabilities.

6. A determination has been made that NSPA and the participating countries can provide substantially the same degree of protection for the sensitive technology being released as the U.S. Government. This sale is necessary in furtherance of the U.S. foreign policy and national security objectives outlined in the Policy Justification.

7. All defense articles and services listed in this transmittal have been authorized for release and export to NATO, Belgium, Czech Republic, Denmark, Greece, Netherlands, Norway, Portugal, and Spain.